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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/092,309 | 03/07/2002 | Yasushi Hara | 020266 | 8403 |

38834 7590 06/04/2004

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

CHOW, DOON Y

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2675

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/092,309

Applicant(s)

HARA ET AL.

Examiner

Dennis-Doon Chow

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 6-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. (6496236) in view of Hisao et al. (JP 2001-135118).

Cole discloses an electronic apparatus comprising: a liquid crystal display device including a plurality of light sources, a controller for selecting and operating at least one of the plurality of light source in accordance with desired brightness of the liquid crystal display device (abstract); and at least one light guide plate for directing light entering thereinto from at least one of the plurality of light source through an end surface thereof toward a liquid crystal unit (see Figs. 3). Cole further discloses the light sources can be a cold cathode fluorescent lamp (CCFL) or light emitting diodes (LEDs) (see col. 2, lines 20-27). Cole also discloses the light guide plate has a rectangular shape and has a uniform thickness, or a rectangular shape and has a thickness tapering from one side toward an opposite side (see Figs. 3).

Although Cole discloses using the CCFL or LEDs as the light source, but fails to disclose using a combination of the CCFL and LEDs as the light source.

Hisao, in the same field, discloses an electronic apparatus comprising: a liquid crystal display device including a plurality of light sources including a CCFL and LEDs;

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and at least one light guide plate including a plurality of parallel grooves (see Fig. 1) for scattering and directing light.

In light of Hisao, it would have been obvious to one of ordinary skill in the art to use Hisao's light source in Cole's invention because the CCFL and LEDs generate different light which provide more light selections for the display device.

3. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cole et al. in view of Hisao as applied to claims 1-3 and 6-19 above, and further in view of applicant's admitted prior.

The modified Cole does not disclose selecting the CCFL when an AC power supply is available, and selecting the LEDs when a battery power supply is available.

The admitted prior art discloses a liquid crystal display device including a plurality of light sources including a CCFL and chemiluminescence, and a selection means for selecting the CCFL when an AC power supply is available and selecting the chemiluminescence when a battery power supply is available.

It would have been obvious to one ordinary skill in the art to use the concept of the admitted prior art in the invention of the modified Cole to select the CCFL when an AC power supply is available and the LEDs when a battery power supply is available. This would have been obvious because of the same reason as used in the admitted prior, which is to reduce power dissipation (see page 1, lines 27-37).

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4. Claims 1-3 and 6-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Hisao.

Hisao discloses an electronic apparatus comprising: a liquid crystal display device including a plurality of light sources including CCFL and LEDs, a controller for selecting and operating at least one of the plurality of light source in accordance with desired brightness of the liquid crystal display device; and at least one light guide plate for directing light entering thereinto from at least one of the plurality of light source through an end surface thereof toward a liquid crystal unit. Hisao further discloses the light guide plate has a rectangular shape and has a uniform thickness, or a rectangular shape and has a thickness tapering from one side toward an opposite side, wherein the light guide plate includes a plurality of parallel grooves (see Fig. 1) for scattering and directing light.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harter, Jr. and Busch et al. teach a display device.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis-Doon Chow whose telephone number is 703-305-4398. The examiner can normally be reached on 8:30-6:00, Alternate Monday off.

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The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Chow
May 28, 2004



DENNIS-DOON CHOW
PRIMARY EXAMINER